



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,466	10/27/2003	Wendy Fong	Q128-US2	5618
31815	7590	05/09/2007		
MARY ELIZABETH BUSH QUALLION LLC P.O. BOX 923127 SYLMAR, CA 91392-3127			EXAMINER YUAN, DAH WEI D	
			ART UNIT 1745	PAPER NUMBER
			MAIL DATE 05/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/695,466

Applicant(s)

FONG ET AL.

Examiner

Dah-Wei D. Yuan

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-15, 28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-15, 28 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03272007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Art Unit: 1745

ELECTRIC BATTERY ASSEMBLY AND METHOD OF MANUFACTURE

Examiner: Yuan

S.N. 10/695,466

Art Unit: 1745

May 4, 2007

Detailed Action

1. The Applicant's Request for Reconsideration filed on March 27, 2007 was received.
2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action issued on December 28, 2006.

Claim Rejections - 35 USC § 103

3. The claim rejections under 35 U.S.C.103(a) as being unpatentable over Okada et al. (US 6,190,798 B1) in view of Nishimura et al. (US 5,929,741) and Joshi (US 6,753,605 B2) on claims 11-15,28,29 are maintained. The rejection is repeated below for convenience.

Okada et al. teach a battery comprising a case having an opening, an electrode assembly (7), a cover (2) made of aluminum and defining a hole (14), a sealing member (26) (plug/terminal) made of aluminum or aluminum alloys. See Figure 3, Column 3, Lines 26-30, Column 4, Lines 54-62, Column 5, Lines 34-60. Nishimura et al. teach a current protector, wherein the aluminum substrate is clad with a copper layer. See Example 5, Figure 7A. Joshi teaches the copper has a higher thermal and electrical conductivity than that of aluminum. See Column 2, Lines 48-63. Therefore, it would have been obvious to one of ordinary skill in the art to add a copper layer onto the aluminum sealing member of Okada et al., because Nishimura and Joshi collectively teach the copper layer can increase the electrical conductivity of the sealing member.

Response to Arguments

4. Applicant's arguments filed on March 27, 2007 have been fully considered but they are not persuasive.

Applicant's principal arguments are

Okada's sealing cover does not serve as a terminal for the battery.

In response to Applicant's arguments, please consider the following comments.

Applicant's is correct in pointing out that the outer case (1) in Okada serves as the positive terminal. The outer case is in electrical contact with the cover member (20), which is also in electrical contact with the sealing member (26). See Figure 3, Column 3, Lines 1-25. It is noted that outer case, cover member and sealing member can collectively be characterized as the terminal, which encompasses the external casing of the battery container. The negative terminal is insulated from the positive terminal by an insulting material (19) as shown in Figure 3. It is also well known in the art that good electrical conductivity of the terminal is critical and important as evidenced by Marple et al. (US 2005/0233214 A1) (see paragraph 58) and Aisenbrey (US 2005/0136326 A1) (see paragraph 20. Therefore, it would have been obvious to one of ordinary skill in the art to add a copper layer onto the aluminum sealing member of Okada et al., because Nishimura and Joshi collectively teach the copper layer can increase the electrical conductivity of the sealing member (terminal).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dah-Wei D. Yuan whose telephone number is (571) 272-1295. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 1745

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dah-Wei D. Yuan
May 4, 2007

A handwritten signature in black ink, appearing to read 'Dah-Wei D. Yuan', with a long horizontal flourish extending to the right.

DAH-WEI YUAN
PRIMARY EXAMINER